REMARKS

Claims 1-3, 5, 6, 8-10, 13-17, and 19-24 are pending in the application. Claims 11 and 12 have been cancelled without prejudice or disclaimer of the subject matter contained therein.

It is noted that the claims amendments are made only for pointing out the claimed invention more particularly, and not for distinguishing the invention over the prior art, narrowing the claims, or for statutory requirements for patentability. Further Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 17 and 19-24 stand rejected under 35 U.S.C. § 101 for being directed to non-statutory subject matter.

Claims 1, 6, and 22-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable under Ausubel et al. (U.S. Patent Publication No. 2004/0054551) (hereinafter Ausubel).

Claims 2-3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable under Ausubelin view of Morrison (U.S. Patent Publication No. 2002/0075285).

Claims 5 and 9-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable under Ausubel in view of Smith et al. (U.S. Patent Publication No. 2002/0032621) (hereinafter Smith).

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable under Ausubelin view of Hambrecht (U.S. Patent No. 6,629,082).

Claims 14-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable under Ausubelin view of Smith and further in view of OFFICIAL NOTICE.

Claims 17 and 19-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable

under Ausubelin view of Morrison in view of Smith and in view of Hambrecht.

Applicant respectfully traverses these rejections in the following discussion.

I. THE CLAIMED INVENTION

An exemplary aspect of the claimed invention, as recited in independent claim 1, is directed to a display for scaling a plurality of bids and items, on a display window. The display scales viewable objects representing the bids and items, such that as a number of bids and items increases, a size of the viewable objects representing the bids and objects decreases. The display includes a dynamic mechanism for enabling a user to dynamically update auction parameters including any of items in the auction, bundle bids under consideration, and changing constraints and a reserve price and an iconic user interface including an analysis window which allows the scaling and any one of an item list window, a bid list window, a constraint window, a result window, a result detail window, a recommendation window, an item detail window, and a bid detail window interactively coupled to the analysis window.

Another exemplary aspect of the claimed invention, as recited in independent claim 17, is directed to a method of interactive bid evaluation for a combinatorial auction on a display apparatus controlled by a processor, the method including scaling, as executed by the processor, a plurality of bids and items displayed on a display window, scaling, as executed by the processor, viewable objects representing the bids and items such that as a number of the bids and items increases, a size of the viewable objects representing the bids and items decreases, providing, as executed by the processor, a real-time recommendation window for providing at least one recommendation on what action to take next in generating an ad hoc

solution, displaying supporting information including any of items, bids, constraints, analysis, results, and optimal solutions on the displays, to allow interactive selection of an optimal solution from the bid evaluation system, the supporting information providing a visualization of how the optimal solution satisfies a demand for each item and each constraint thereon, and enabling, as executed by the processor, a user to dynamically update auction parameters including any of items in the auction, bundle bids under consideration, changing constraints, and a reserve price, and generating the ad hoc and optimal solutions iteratively for exploratory analysis.

Another exemplary aspect of the claimed invention, as recited in independent claim 22, is directed to a method of evaluating bids in a combinatorial auction, the method including structuring, as executed in a processor, bid and item information on a visual interface of a display and providing, as executed in the processor, an analysis capability for facilitating at least one of an evaluation and a selection of at least one solution encompassing bids in a real-time recommendation window for providing at least one recommendation on what action to take next in generating an ad hoc solution. The visual interface allows a user to directly manipulate data points in the visual interface to explore an information space of potential solutions and suppliers and to discover at least one solution optimal to the user's needs.

Conventional bid evaluations present information in a non-intuitive manner. The decision processes are formalized and based on decision tree and pruning techniques. Furthermore, conventional bid evaluations are presented with no explanation, simply making their decisions as a "black box." Finally, conventional bid evaluations do not provide interactive analysis features.

The claimed invention is directed to combinatorial auctions. These types of auctions provide a useful negotiation mechanism when there are complementarities or substitutability among several products. In a procurement situation, for example, suppliers can often provide better overall prices, if they are allowed to deliver not just one product type for the buyer (e.g., an office owner), but a bundle of products that complement each other (e.g., computers, monitors, keyboards, and printers). Conventionally, a hurdle for the use of combinatorial auctions in practice has been that their bid evaluation is computationally difficult and complex.

The claimed invention, however, "scales viewable objects representing said bids and items, such that as a number of bids and items increases, a size of said viewable objects representing said bids and objects decreases," and the display includes "a dynamic mechanism for enabling a user to dynamically update auction parameters including any of items in the auction, bundle bids under consideration, and changing constraints and a reserve price and an iconic user interface including an analysis window which allows the scaling and any one of an item list window, a bid list window, a constraint window, a result window, a result detail window, a recommendation window, an item detail window, and a bid detail window interactively coupled to the analysis window," as recited in independent claim 1. This is important for explaining a proposed bid in a reverse auction. *See* the Application, page 18, lines 5-11.

Indeed, exemplary embodiments of the claimed invention provide an optimization for combinatorial auctions. That is, combinatorial auctions are a specific form of auction that requires a different solution set that other auctions. The claimed invention also exemplarily provides an interactive bid evaluation solution and an interactive visual representation with a

display for scaling a plurality of bids and items, on a display window.

Contrary to the claimed invention, Ausubel teaches a system and method for a computer-based auction that addresses a different problem and provides a different solution than the claimed invention exemplarily provides. That is, generally, Ausubel fails to teach or suggest any of optimizing combinatorial auctions, providing an interactive bid evaluation solution and an interactive visual representation with a display for scaling a plurality of bids and items, on a display window.

Next, Hambrecht teaches an auction system for securities trading. On the other hand, Hambrecht fails to teach or suggest any of optimizing combinatorial auctions, providing an interactive bid evaluation solution and an interactive visual representation with a display for scaling a plurality of bids and items, on a display window.

Smith teaches a suction method for transformation bidding. Nonetheless, Smith generally fails to teach or suggest any of optimizing combinatorial auctions, providing an interactive bid evaluation solution and an interactive visual representation with a display for scaling a plurality of bids and items, on a display window.

Finally, Morrison teaches a computer graphics system for pixel zoom function which is completely unrelated to the claimed invention. Accordingly, Morrison also fails to teach or suggest any of optimizing combinatorial auctions, providing an interactive bid evaluation solution and an interactive visual representation with a display for scaling a plurality of bids and items, on a display window.

II. THE ALLEGED SECTION 101 REJECTION

On page 3 of the Office Action, the Examiner rejects claims 17 and 19-24 for

allegedly being directed to non-statutory subject matter. Applicant disagrees since the claim wording is clearly directed to a specific machine, by reference to "displayed on a display window," and being performed on a processor. That is, there clearly being no known way to satisfy the plain meaning of the claim language using a mental process. Therefore, claims 17 and 19-24 are tied to statutory subject matter.

Accordingly, Applicant requests withdrawal of this rejection.

III. THE ALLEGED PRIOR ART REFERENCE

On page 4 of the Office Action, the Examiner alleges Ausubel renders obvious the invention of **claims 1, 6, and 22-24.** Furthermore, on page 5 of the Office Action, the Examiner further alleges that a combination of Ausubel and Morrison would teach the claimed invention recited in claim 2 and 3. Next, the Examiner alleges that claims 5 and 9-13 would be rendered obvious over Ausubel in view of Smith. On page 8, the Examiner alleges that claims 14-16 are unpatentable in view of Ausubel, Smith, and the Examiner's own Official Notice. Finally, on page 10 of the Office Action, the Examiner alleges that Ausubel, in view of Morrison, Smith, and Hambrecht would teach the invention recited in claims 17 and 19-21.

First, Applicant submits that to establish a prima facie case of obviousness, several basic criteria must be met. For example, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP 706.02(j). In addition, as stated in *KSR,* there must be some

articulated reasoning with some rational underpinning to support the legal conclusion of obviousness (*In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006) cited with approval in *KSR Int'l. v. Teleflex, Inc.*, 127 S.Ct. 1727 (2007)).

Claim 1 has been amended to recite, among other things, that the display originally recited in claim includes "a dynamic mechanism for enabling a user to dynamically update auction parameters including any of items in the auction, bundle bids under consideration, and changing constraints and a reserve price and an iconic user interface including an analysis window which allows the scaling and any one of an item list window, a bid list window, a constraint window, a result window, a result detail window, a recommendation window, an item detail window, and a bid detail window interactively coupled to the analysis window," as formerly recited in claims 11 and 12.

Exemplary embodiments of the claimed invention provide an optimization for combinatorial auctions. That is, combinatorial auctions are a specific form of auction that requires a different solution set than other auctions. The claimed invention also exemplarily provides an interactive bid evaluation solution and an interactive visual representation with a display for scaling a plurality of bids and items for combinatorial auctions, on a display window.

Contrary to the claimed invention, Ausubel teaches a system and method for a computer-based auction that addresses a different problem and provides a different solution than the claimed invention exemplarily provides. First, Ausubel is not directed to combinatorial auctions. Instead, Ausubel focuses on conventional, non-combinatorial auctions (i.e., a simple, conventional e-bay style auction).

That is, Ausubel fails to teach or suggest any of optimizing combinatorial auctions,

providing an interactive bid evaluation solution and an interactive visual representation with a display for scaling a plurality of bids and items, on a display window, as recited in the independent claims.

Next, Hambrecht teaches an auction system for securities trading. On the other hand, Hambrecht fails to teach or suggest any of optimizing combinatorial auctions, providing an interactive bid evaluation solution and an interactive visual representation with a display for scaling a plurality of bids and items, on a display window.

Smith teaches a suction method for transformation bidding. Nonetheless, Smith generally fails to teach or suggest any of optimizing combinatorial auctions, providing an interactive bid evaluation solution and an interactive visual representation with a display for scaling a plurality of bids and items, on a display window. Therefore, on page 7 of the Office Action, where the Examiner alleges that Smith teaches the limitations of claims 11 and 12, is incorrect. Instead, contrary to the Examiner's allegations, Smith teaches a special type of auction using "bid transformation" and "lot aggregation." On the other hand, the claimed invention recites an interactive visual system for decision support that helps discover an optimal solution (for maximal price, for instance) for a combinatorial auction. That is, does not teach combinatorial auctions, an interactive visual system for decision support ("interactive bid evaluation system" in claim 1), or "viewable objects" (as recited in claim 2). Furthermore, Smith also fails to teach or suggest that the "display includes a dynamic mechanism for enabling a user to dynamically update auction parameters including any of items in the auction, bundle bids under consideration, and changing constraints and a reserve price and an iconic user interface including an analysis window which allows the scaling and any one of an item list window, a bid list window, a constraint window, a result window, a

result detail window, a recommendation window, an item detail window, and a bid detail window interactively coupled to the analysis window."

Contrary to the Examiner's allegation on page 7 of the Office Action that Smith, at paragraphs [0045-0050], teaches the limitations of claims 11 and 12, Smith teaches communication of auctions between different computer network elements, such as users and a host computer. There is no teaching of any of the claimed elements recited now in independent claim 1.

Therefore, Smith fails to teach or suggest the claimed invention. In particular, where the Examiner alleges that Smith teaches scaling a plurality of bids," as recited in independent claim 1, Smith only teaches auction management software across a network. That is, there is no teaching or suggestion of "scaling of viewable objects," as recited in independent claim 1.

Furthermore, the Examiner admits that Smith fails to teach "a real-time recommendation window." The Examiner then alleges that Linden makes up for Smith's deficiencies.

Linden teaches personalization / customization of web pages for specific users / sessions based on the user's actions in the session. Even in combination with Smith, Linden is not pertinent to the present application, because the claimed invention does not deal with personalization, for example, and is not limited to a Web environment.

Thus, at paragraphs [0236 and above], Linden fails to teach or suggest, among other things, "a real-time recommendation window for providing at least one recommendation on what action to take next in generating the ad hoc solution," as recited in claim 1. Instead, contrary to the Examiner's allegations, Linden only teaches personalization and not a real-time ad-hoc solution for an auction. The claimed ad hoc solution being "interactively

generate an ad hoc solution by using visual operations," that also allows "for comparing the ad hoc solution with an optimal solution generated by said processor." That is, the real-time product referrals of Linden do not teach or suggest a real-time ad hoc solution, as recited in the independent claims.

Accordingly, Linden and Smith, either alone or in combination, fails to teach or suggest the invention as recited in independent claims 1, 17, and 22.

Finally, Morrison teaches a computer graphics system for pixel zoom function which is completely unrelated to the claimed invention. Accordingly, Morrison also fails to teach or suggest any of optimizing combinatorial auctions, providing an interactive bid evaluation solution and an interactive visual representation with a display for scaling a plurality of bids and items, on a display window.

However, Applicant respectfully submits that the alleged facts of which the Examiner attempts to take Official Notice (*e.g.,* page 9 of the Office Action) are not capable of instant and unquestionable demonstration as being well-known, and therefore, it is not appropriate for the Examiner to attempt to take "Official Notice" of these alleged facts (e.g., see MPEP §2144.03). Further, the Examiner must provide Applicant with the explicit basis on which the Examiner regards the matter as subject to Official Notice.

With respect to claims 2-3, 5, 6, 8-10, 13-16, and 19-24, which depend from independent claims 1, 17, and 22, respectively, each of these claims contains all the limitations contained within independent claims 1, 17, and 22 and are therefore also in condition for allowance.

Therefore, Applicant respectfully requests the Examiner to reconsider and withdraw this rejection.

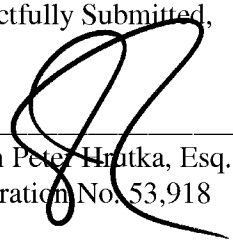
III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-3, 5, 6, 8-10, 13-17, and 19-24, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,



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